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EUROPEAN PATENT APPLICATION

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Antibody-therapeutic agent conjugates.

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This invention relates to antibody-therapeutic agent conjugates having a therapeutic agent covalently attached to an antibody or antibody fragment. Also described are methods for intermediates in the preparation of antibody conjugates. Therapeutic in vivo methods utilizing such antibody-therapeutic agent conjugates are described. Additionally novel photosensitizers suitable for use in preparing antibody-therapeutic agents are also described.

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PARTIAL EUROPEAN SEARCH REPORT
which under Rule 45 of the European Patent Convention
shall be considered, for the purposes of subsequent
proceedings, as the European search report

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Application number
EP 85 40 1776

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
Y	EP - A - 0 088 695 (CYTOGEN CORP.) * Whole document *	1-40, 42	A 61 K 39/395
D, Y	THE JOURNAL OF IMMUNOLOGY, vol. 130, no. 3, March 1983, pages 1473-1477 American Association of Immunologists, US; D. MEW et al.: "Photoimmuno-therapy: treatment of animal tumors with tumor-specific monoclonal antibody-hematoporphyrin conjugates" * Whole document *	1-7, 9-15, 17-39, 42	
Y	CHEMICAL ABSTRACTS, vol. 82, no. 3, 20th January 1975, page 361, abstract no. 15067u, Columbus, Ohio, US; W.T. SHEARER et al.: "Cytotoxicity with antibody-glucose oxidase conjugates specific for a human colonic cancer and carcinoembryonic antigen", & INT.J. CANCER 1974,		
INCOMPLETE SEARCH			TECHNICAL FIELDS SEARCHED (Int. Cl.4)
<p>The Search Division considers that the present European patent application does not comply with the provisions of the European Patent Convention to such an extent that it is not possible to carry out a meaningful search into the state of the art on the basis of some of the claims.</p> <p>Claims searched completely: Claims searched incompletely: Claims not searched: 41 Reason for the limitation of the search:</p> <p>Method for treatment of the human or animal body by surgery or therapy (see art. 52(4) of the European Patent Convention).</p>			A 61 K
Place of search THE HAGUE		Date of completion of the search 22-03-1988	Examiner SKELLY
CATEGORY OF CITED DOCUMENTS			
<p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p>			



CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing more than ten claims.

- ☐ All claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for all claims.
- ☐ Only part of the claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claims:
- ☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

X

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirement of unity of invention and relates to several inventions or groups of inventions,

namely:

1. Claims 1-40: Antibody-therapeutic agent conjugates
2. Claim 42: Novel compound
3. Claim 43: Novel compound

- ☒ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
- ☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:
- ☐ None of the further search fees has been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:



DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (Int. Cl. 4)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
P,Y	14(4), 539-47 * Abstract * --	8,16,40	
	CHEMICAL ABSTRACTS, vol. 102, no. 15, 15th April 1985, page 283, abstract no. 128005x, Columbus, Ohio, US; Ch.K. WAT et al.: "Photosensitizer- protein conjugates:potential use as photoimmunotherapeutic agents", & PROG.CLIN.BIOL.RES. 1984, 170 (Porphyrin localization treat tumors), 351-9 * Abstract * --	1-7,9- 15,17- 39	TECHNICAL FIELDS SEARCHED (Int. Cl. 4)
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A	THE JOURNAL OF IMMUNOLOGY, vol. 125, no. 3, September 1980, page 1201, Williams & Wilkins Co. US; G.W. PHILPOTT et al.: "Selective binding and cytotoxicity of rat basophilic leukemia cells (RBL-1) with immunoglobulin E-biotin and avidin-glucose oxidase conjugates" --		
Y	CHEMICAL ABSTRACTS, vol. 89, no. 13, 25th September 1978, page 29, abstract no. 110773z Columbus, Ohio, US; & JP - A - 77 141 882 (E. HASEGAWA et al.) 26-1-1977 * Abstract * --	42	



DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
A	CHEMICAL ABSTRACTS, vol. 97, no. 7, 16th August 1982, page 224, abstract no. 51193a Columbus, Ohio, US; H. SAKURAI et al.: "Growth inhibition and photoxidative toxicity in the housefly. Musca domestica L. caused by xanthene dye in larval growth medium and after injection" & ENVIRON.ENTOMOL. 1982, 11(2), 467-70 * Abstract *	43	
P,Y	-- CANCER RESEARCH, vol. 45, September 1985, pages 4380-4386 D. MEW et al.: "Ability of specific monoclonal antibodies and conventional antisera conjugated to hematoporphyrin to label and kill selected cell lines subsequent to light activation" * Whole document *	1-7, 9-15, 17-39	TECHNICAL FIELDS SEARCHED (Int. Cl.4)
P,A	-- CHEMICAL ABSTRACTS, vol. 103, no. 5, 5th August 1985, page 491, abstract no. 37259n Columbus, Ohio, US; R. OCAMPO et al.: "Identification of polar porphyrins in oil shale" & J.CHEM.SOC.CHEM.COMMUN. 1985, (4), 198-200 * Abstract *	42	
